

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application: Carl Q. Howard

Serial No.: 10/585,386

Filed: 07/06/2006

Group Art Unit: 3651

Examiner: Hess, Douglas A.

Confirmation No.: 2994

For: DEVICE TO REDUCE NOISE TRANSMISSION THROUGH  
THE GAP BETWEEN ESCALATOR STEPS

**REPLY BRIEF**

Mail Stop AF  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This is in reply to the Examiner's Answer mailed on March 20, 2009.

The Examiner has not established a *prima facie* case of obviousness against any of Appellant's claims. The Examiner has not addressed any of the arguments regarding the inability to make the proposed modifications to the *Soldat* reference. Further, the Examiner still has not explained how several of Appellant's claim limitations are allegedly met by the proposed modifications.

**Claim 1**

The Examiner does not provide any basis for any reason for including a sound insulating material that is distinct from the brush 3 of the *Soldat* reference into the arrangement of that reference. It is not enough to simply point to the brush 3 and contend that it is a sound

transmission reducing member. Claim 1 also includes a sound insulating material that is distinct from the sound transmission reducing member.

There is no reasonable basis to add such a sound insulating material into a reference that teaches a brush for cleaning a riser of a step. Sound control is entirely outside of the scope of the reference. The only possible explanation for the Examiner's proposed addition is impermissible hindsight reasoning based on Appellant's disclosure and claims.

Perhaps the Examiner intends to use the annotated drawing attached to the Examiner's Answer as showing how the portion of the brush 2, 3 that is labeled 2 and annotated as a "sound insulator" or the holder 4 that is annotated as a "lip formed w/step" is the same as the sound insulating material of Appellant's claim 1. If so, that is an unreasonable interpretation of what is disclosed in the *Soldat* reference. The brush 2, 3 of that reference is a single unit and cannot be considered to be distinct from itself. The portion of the brush 2, 3 labeled 2, therefore, cannot be considered distinct from the sound transmission reducing member, which the Examiner contends is met by the bristles 3 of the brush 2, 3.

The holder 4 cannot be considered to be a sound insulating material because there is nothing within the reference that in any way suggests or teaches one skilled in the art that the holder 4 has anything to do with sound insulation. The metal holder 4 would reverberate and potentially amplify sound as much as it would potentially insulate sound. Moreover, the holder 4 is not in a position in which it could provide any sound insulating effect with respect to the gap between the steps.

There is nothing within the *Soldat* reference corresponding to the sound insulating material that is distinct from the sound transmission reducing member of Appellant's claim 1. The Examiner does not even contend that there is such an element. At best, on page 4, it appears

that the Examiner contends that the “insulator 2” would correspond to this claimed limitation. As already pointed out above, it is not possible to construe the portion of the brush 2, 3 which is labeled as 2 as being distinct from the brush, itself. If the Examiner is going to contend that the bristles 3 of the brush 2, 3 is the sound transmission reducing member, then the Examiner cannot also contend that the portion of the brush 2, 3 labeled 2 somehow comprises a sound insulating material that is distinct from that brush. There is no way of interpreting the *Soldat* reference to establish a *prima facie* case of obviousness nor is there any legally sufficient reason for modifying it to make it consistent with Appellant’s claimed 1. The rejection of claim 1 must be reversed.

#### **Claim 16**

It is not possible to modify the bristles 3 of the brush 2, 3 of the *Soldat* reference to provide a sound transmission reducing member that is formed on a step as part of the step and made of the same material as the step. The hypothetical suggestion on page 5 of the Examiner’s Answer that “One could argue the bristles could be partially made of the same material as the steps (i.e. the base of the bristles) for strength and durability reasons,” is not only based on impermissible hindsight reasoning but is utterly impractical. Why would anyone make bristles of a brush intended to clean a riser of a step out of two different materials. Apparently, the Examiner has conceded Appellant’s point that one cannot make the bristles 3 out of the metal step material without rendering the *Soldat* arrangement useless because metal bristles would scratch the risers and make them look terrible (they would be better off left dirty than scratched). The suggestion by the Examiner proves Appellant’s point that it is not possible to make the proposed modification.

Even if it were somehow conceivable that somebody would make brush bristles out of two different materials, how would the second material be considered to be made as part of the step and be of the same material as the step? There is no way to stay within the bounds of an acceptable and reasonable obviousness analysis while making the Examiner's suggested hybrid bristles.

Even if the hybrid bristles were somehow reasonable and not based on impermissible hindsight, they are still insufficient to establish a *prima facie* case of obviousness. Appellant does not concede that the bristles could be made as suggested by the Examiner on page 5 of the Examiner's Answer. There is no basis for such extrapolation from the teachings of the reference. Moreover, the bristles are not made as part of the step nor are they made of the same material as the step. It is clear from the teachings of the *Soldat* reference that the brush 2, 3 is placed into the holder 4. Neither of the portions of the brush 2, 3 are made as part of the step nor is there any teaching regarding making them of the same material as the step. There is no basis for modifying the *Soldat* reference to achieve such an arrangement without having Appellant's disclosure and claims for the suggestion for doing that.

One skilled in the art looking at the *Soldat* reference would understand that it is suggesting a way to clean the riser surface of a step. It does not even recognize the problem that was first recognized by Appellant and addressed by Appellant's invention. There is no way to establish a *prima facie* case of obviousness against claim 16 based on the *Soldat* reference. Additionally, the Examiner does not dispute that if one were to change the bristles 3 to make them consistent with the arrangement of Appellant's claim 16, that would result in making the bristles 3 ineffective for their intended purpose, which prevents such a modification from being made when evaluating whether there may be a *prima facie* case of obviousness.

The rejection of claim 16 must be reversed.

### **Claim 17**

In addition to the missing elements from claim 16 and the missing legally required reason for making a modification to the *Soldat* reference to somehow try to make it consistent with claim 16, there is no additional sound transmission reducing member attached to the step as required by claim 17. The Examiner's contention on page 4 of the Answer that "The fact is that any material blocking two separate areas provides some type of sound reduction whether that is the intended purpose or not," is an unreasonable conclusion that does not provide any support for the rejections in this case. Consider a stereo speaker, which has a dust cover over the speaker elements. Speaker manufacturers are most interested in having the truest sound produced by their speakers to be experienced by a listener. They would not provide a material that would provide sound reduction to separate the area in which the sound producing elements of the speaker are situated and the area in which the listener's ears are situated. That is only one example of a situation where a material "blocking two separate areas" does not provide "some type of sound reduction" and, therefore, the Examiner's statement does not provide any basis for sustaining the rejection.

### **Claim 19**

To add a sound absorbing material as recited in claim 19 to the arrangement in the *Soldat* reference can only be suggested by Appellant's disclosure and claims. The *Soldat* reference is concerned exclusively with providing a brush for cleaning the riser surface on the steps. There is no discussion of sound reducing features or any desire or need to reduce sound transmission. Therefore, the only possible suggestion for making a modification to the *Soldat* reference to

somehow distort it into an arrangement where it would be consistent with Appellant's claim 19 is impermissible hindsight.

### **Claim 21**

The Examiner contends that the holder 4 of the underside of the step in the *Soldat* reference corresponds to the lip of Appellant's claim 21. The Examiner contends that the holder 4 is "positioned relative to the interface" of the steps. That is not all that claim 21 requires, however. Appellant's claim 21 recites a lip that is "positioned relative to the interface to at least partially obstruct a sound pathway that includes the spacing [at an interface between a first and second step] such that the lip is operative as a sound transmission reducing member." The holder 4 in the *Soldat* reference is beneath the step tread surface and does not come anywhere near the interface in a manner that would allow it to at least partially obstruct the sound pathway that includes the spacing. The holder 4 is not operative as a sound transmission reducing member. The holder 4 is so far to the left (according to the drawing) from the spacing between the steps that any sound heading in an upward direction toward that spacing will clearly reach that spacing unobstructed by the holder 4. Therefore, the Examiner's interpretation of the *Soldat* reference is unreasonable and does not provide a basis for a *prima facie* case of obviousness.

### **Claim 22**

The Examiner's position regarding claim 22 now interprets the brush 2, 3 differently than it was interpreted before. The different interpretation of the reference suggests that hindsight reasoning is being used for purposes of trying to manipulate the teachings of the *Soldat* reference into some sort of arrangement that somehow corresponds to a *prima facie* case of obviousness. Moreover, even if the brush could be considered the separate sound insulating material, there still is no lip as required by the claim and therefore there is no *prima facie* case of obviousness.

Conclusion

All rejections must be reversed.

Respectfully submitted,

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